

B1
C1

forming a second database table having a plurality of entries, each entry defining a relationship between said plurality of objects, wherein each entry is associated with at least one of the multiple hierarchies.

B2
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21. (Twice Amended) A method of creating a relational data structure for storage and retrieval of data having multiple simultaneous hierarchical database relationships without needing dedicated database relationships between objects in the multiple hierarchies, the method comprising:

forming a table of members available in the multiple simultaneous hierarchical database relationships and data associated with each member;

forming a table of reporting relationships among the members available in the multiple simultaneous hierarchical database relationships; and

forming a table having a set of hierarchies, each hierarchy corresponding to a reporting relationship in said table of reporting relationships.

B3
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23. (Amended) A method for representing at least a first hierarchical relationship using a relational data structure, wherein the first hierarchical relationship includes a plurality of objects, wherein each of the plurality of objects is related to at least one other object of the plurality of objects as a parent object or a child object in a parent-child relationship, the method comprising:

creating a first table including the plurality of objects and associated data, wherein the first table associates each of the plurality of objects with an object identifier; and

creating a second table, wherein each parent-child relationship is represented by associating the object identifier of each parent object with the object identifier of each related child object and indicating that each parent-child relationship is associated with the first hierarchical relationship, so that multiple simultaneous hierarchies can be defined using the relational data structure without needing dedicated database relationships between objects in the multiple hierarchies.

B4
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31. (Amended) A relational data structure for representing multiple simultaneous hierarchies without needing dedicated database relationships between objects in each of the multiple hierarchies, wherein the relational data structure is based on a plurality of objects, the data structure comprising:

a first table for:

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organizing a plurality of objects, wherein each object is related to at least one other object by a defined relationship;

storing an object identifier associated with each of the plurality of objects;

storing associated data for each object identifier, and

a second table for:

associating the object identifier of each of the plurality of objects with the object identifier of each related object to represent each defined relationship; and

storing a hierarchy identifier associated with each relationship for indicating that each relationship is associated with a particular one of the multiple hierarchies.
